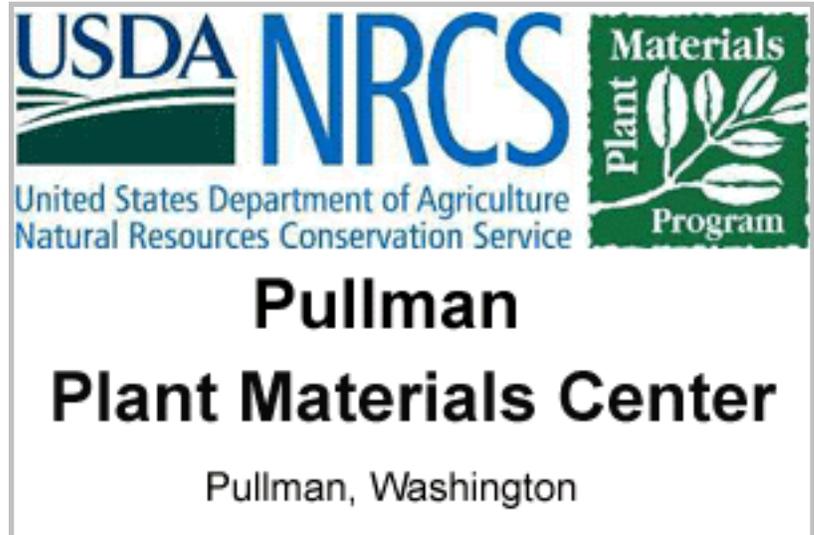


Protocol Information

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Family Scientific Name: **Primulaceae**

Family Common Name: **Primrose**

Scientific Name: ***Dodecatheon pulchellum* (Raf.)
Merr. ' '**

Common Synonym: ***Dodecatheon pauciflorum*
Greene ' '**

Common Name: **Darkthroat shooting star**

Species Code: **DOPU**

Ecotype: **Paradise Creek drainage near
Pullman, Washington.**

General Distribution: **Western North America from Alaska to California and east to New Mexico and Manitoba. In eastern Washington it is usually found in vernal moist, open prairies and meadows to Ponderosa pine woods. Mean annual precipitation range is from 12-30 inches (USDA NRCS 2006). Wetland indicator status is FACW (US Fish and Wildlife Service 1988).**

Propagation Goal: **Plants**

Propagation Method: **Seed**

Product Type: **Container (plug)**

Stock Type: **10 cu. in.**

Time To Grow: **3 Years**

Target Specifications: **A tight root plug may not be attainable with this small statured species.**

Propagule Collection: **Seeds are collected when the capsules begin to split in June. Seed is brown in color and small. Seed is stored in paper bags or envelopes at room temperature until cleaned.**

Propagule Processing: **Capsules are easily crushed and seed cleaned with an air column separator. Clean seed is stored at 40 degrees Fahrenheit and 40% relative humidity.**

Pre-Planting Treatments: **Extended cold, moist stratification is needed. Cool spring temperatures may also be necessary. In trials at the PMC, no germination occurred without stratification and no seed germinated after 30 days cold, moist stratification. Seed planted in containers in November and left outside began emerging in late March and reached 65% by late April. Seed of *Dodecatheon meadia* requires 2 months of cool, moist stratification (Greene & Curtis 1950).**

Growing Area Preparation/
Annual Practices for Perennial Crops: **In early November seed is sown in 10 cu. in. Ray Leach Super cells filled with Sunshine #4 and covered lightly. A thin layer of pea gravel is applied to prevent seeds from floating. Conetainers are watered deeply and placed outside.**

Establishment Phase: **Conetainers remain outside. They are watered only during dry spells. Plants begin emerging in late March. Germination occurs over a 3-4 week period.**

Length of Establishment Phase: **4 weeks**

Active Growth Phase: **Plants are watered as needed while outside and fertilized once a week with a water soluble, complete fertilizer. They are moved to the lath house in June. The plants develop small rosettes with several true leaves. They will not go dormant with summer temperatures but cease growing.**

Length of Active Growth Phase: **2 months**

Hardening Phase: **Fertilizer is withheld in September and water decreased to harden the plants for winter. Since the plants are grown outside, additional hardening is not needed.**

Length of Hardening Phase:

Harvesting, Storage and Shipping: **Plants are stored in the lath house over winter. They should be afforded some protection from extreme cold temperatures. Mulch or foam sheets provide sufficient protection. The protection should be removed in late winter or early spring as temperatures begin to rise.**

Length of Storage:

Outplanting performance on typical sites: **Because the plants begin growing early in the spring, late fall outplanting is preferred where soils are generally too muddy in February and early March. However, the tapered plug from the container has a tendency to frost heave and leave the upper part of the plug exposed. Fall transplants should be checked in early spring and exposure of the plug corrected. Transplanting is done in late October by using an electric drill and portable generator to drill 1.5 inch diameter holes at the planting site. Survival in a seed increase planting without competing vegetation was 60%. A few plants flowered the following spring.**

Other Comments: **Plants should not be dug up from stands in the wild. Wild grown plants rarely survive the transplanting process (Parish 1996, Kruckeberg 1996).**

Some authorities combine *D. pulchellum*, *D. pauciflorum*, and *D. cusickii*, while others consider them separate species.

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